

CAVE EXPLORING

A Thesis

Presented by

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#### SUMMARY.

Cave exploration has been given the scientific name of Speleology. This science has to do principally with the exploring and mapping of caves. It serves the geologist, paleontologist, biologist, and others. It serves the general public and commercial interests by uncovering valuable water supplies, tracing sources of pollution, determining sources of mineral deposits and other valuable public services.



## CAVE EXPLORING.

### INTRODUCTION.

Cave exploring is popularly referred to as a sport, but it should be pointed out that it is a sport not entirely lacking in utilitarian or scientific objectives. It was first pursued as a branch of archaeological or paleontological research and later developed as a separate science to study the kinds of caves, their physical characteristics, the plant and animal life they contain, and the various types of mineral deposits.

### BIRTH OF A NAME.

This truly scientific study of caves soon could no longer be referred to as cave exploring, and so, utilizing the Greek word spelaion meaning cave, the word speleology was originated. Speleology is a term of both broad and narrow meaning. In the broadest sense it covers all knowledge about caves; their geography, geology, hydrography, fauna, and paleontology. However, most speleologists confine their attention particularly to the physical characteristics of caves. Speleology itself is a comparatively new science, but the search for human and animal remains in caves has been carried on since early in the nineteenth century, and much interesting and valuable information has been recorded.

### PEOPLE INTERESTED.

Cave exploring as such is participated in mainly by three groups of people. The first is the sportsman who explores purely for sport, the second is the layman who makes the study of caves a hobby, and the third is the scientist who makes some particular phase of cave study his life work. The scientist is usually not referred to as a true speleologist because his interest generally is in only one aspect of speleology, such as geology, fauna, hydro-

graphy, etc., and to him speleology is simply a means to an end. The sportsman is likewise not usually a speleologist, and has become known by the title of "Spelunker" because he goes to a cave merely to "see what he can see". This leaves to the layman the true field of speleology which is the recording and correlating of the mass of data collected from all the various sources.

#### ORGANIZATION OF THE NATIONAL SPELEOLOGICAL SOCIETY.

The National Speleological Society which has been in existence only since the first of January, 1941, was a direct outgrowth of the Speleological Society of the District of Columbia which was organized in May, 1939. The purpose of this Society is to promote interest in, and advance in any and all ways, the science of speleology and to promote fellowship among those interested therein. The scope of cave study which the Society sponsors is unlimited and the organization accepts for membership any person interested in caves or their study. The list of permanent committees included in the organization will give one an idea of its varied interests. They include: Bibliography and Library, Bulletin and Publications, Equipment and Safety, Exploration and Location, Fauna, Finance, Formations, General Geology, Hydrography (groundwater), Individual Caves, Maps and Mapping, Membership, Paleontology, Photography, Program and Activity, Publicity, and Records.

#### ACTIVITIES.

The work of the Society is based primarily on data taken in the field. This means that field trips must be organized to cover all phases of cave study. The principal mission of any trip is mapping the cave and making a log of what expired, and collecting specimens to accompany any



notes or sketches turned in. It is an unwritten rule in the Society that any map-notes taken by a member will be drawn up by him within a week, with all data necessary for a tracing plainly written thereon. This procedure eliminates as much as possible erroneous interpretations of notes which are taken under great handicaps. The sketches are traced on either paper or cloth, depending on the importance of the cave, and blue prints and photostats then made as necessary. All pertinent information is set down in the log, and published in the Society's Bulletin. The Bulletin of the National Speleological Society is issued intermittently as the need arises, and each gives a complete summary of the Society's work for the period subsequent to the preceding issue.

#### PRACTICAL UTILITY.

In the United States, underground exploration has uncovered valuable water-supplies and mineral deposits, and promoted the public welfare by determining sources of water pollution. During the short period in which Speleology has been taken up as a hobby, discoveries have been made that may be the source of considerable profit in the future.

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